



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: SR-6J

December 7, 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Jerry C. Winslow
Xcel Energy
414 Nicollet Mall (RS-8)
Minneapolis, MN 55401

Re: Ashland / Northern States Power Lakefront Superfund Site
Administrative Order on Consent / CERCLA Docket No. V-W-04-C-764
Approval of the RI/FS Work Plan dated October 18, 2004

Dear Mr. Winslow:

In accordance with the Administrative Order on Consent (AOC), CERCLA Docket No. V-W-04-C-764, Part X., paragraph 21 (a) and (b), the United States Environmental Protection Agency (EPA) hereby approves the October 18, 2004 version of the RI/FS Work Plan, with the conditions specified in Attachment 1.

We appreciate the time you took at our September 8th and 9th meeting and appreciate the cooperative effort you have shown in making the many revisions EPA had previously requested in our July 2004 letter. Xcel may address the attached conditions through errata pages and via attachments to be amended to the Work Plan. Most modifications are of a clarifying nature. Some will require additional discussion (and we can handle these through conference calls, emails, and/or a technical meeting). As specified in the AOC, the usual amount of time to make revisions is 21 calendar days. However, due to the upcoming holiday season, and the fact that the conditions only apply to work that isn't scheduled to occur until May 2005, Xcel may submit the revisions by February 1, 2005. EPA looks forward to the upcoming field work, and working with Xcel Energy on the Remedial Investigation Report, Risk Assessment, and Feasibility Study.

Now that the documents are final, please also provide a final hard copy (and any amendments and attachments) of the Work Plan documents to EPA's consultant:

Omprakash S. Patel
Weston Solutions Inc.
750 East Bunker Court
Suite 500
Vernon Hills, IL 60061

As Xcel has agreed to previously, copies of all amendments and attachments should also be sent to Jen Lawton at NOAA, Ralph Dashner/Kirsten Cahow at the Bad River Band of Lake Superior Chippewa, Charlotte Dawn at the Red Cliff Band of Lake Superior Chippewa, and Jamie Dunn at the WDNR.

EPA may request additional hard and electronic copies for placement into the Administrative Record and Site Repositories in the future.

Sincerely,

Sharon Jaffess, Remedial Project Manager
Superfund Division

cc: Kirsten Cahow, Bad River Band of Lake Superior Chippewa
Ralph Dashner, Bad River Band of Lake Superior Chippewa
Charlotte Dawn, Red Cliff Band of Lake Superior Chippewa
James Dunn, WDNR
Jennifer Lawton, NOAA

Attachment 1

1. Please note that this approval does not reflect EPA's concurrence with **all** data interpretation statements expressed in the Work Plan. The purpose of the Work Plan is to identify the tasks necessary to complete the RI/FS. The Work Plan also provides a summary of previous data and interpretations of that data, setting up a working conceptual site model, which has helped establish data gaps and the requirements for completing an RI/FS at this Site. By approval of this Work Plan, EPA is not "approving" all of the language concerning interpretation of previous data (for example, EPA does not agree that the Miller Creek Formation is a complete hydrologic barrier and until additional data is collected, the Agency does not reach the same conclusion; that the Copper Falls Formation and the contamination within it, is completely separate from the surface fill or the surface water). To be clear, while the Agency is in agreement with many conclusions Xcel Energy has derived from examining the pre-existing data set, and accepts the current conceptual site model as a good basis to start from, final conclusions concerning the Site expressed in this version of the Work Plan should be viewed as plausible scientific assumptions that will either be proven out, or shown to be inaccurate, as part of this new data collection effort.

2. Smelt is mentioned in various places within the report as a "targeted" species for use in the risk assessment work. As previously instructed by EPA, smelt is not an appropriate target species for evaluation in a standard risk assessment program for numerous reasons such as its limited time at the Site. Its use must be carefully qualified and quantified. Based on previously collected information, it appears that smelt may in fact be impacted by high levels of contaminants during a fishing event within the impacted inlet (because of slicks caused in the water column, PAHs that adhere to anglers' nets, some behavior of the smelt, etc.). In addition to the target species identified by our partners at NOAA, the Bad River Band, and the Red Cliff Band, smelt results can be considered in our work. However, the smelt results must not be integrated into site averages. More discussion on this topic, and agreements concerning how the data is to be interpreted can be made once we complete the field program and begin the data evaluation program.

3. Clarification concerning sediment and benthic organism sampling and data interpretation:

14 additional sediment sampling locations for chemistry data, and 8 additional co-located sediment/benthic invertebrate sampling locations have been agreed to. The exact locations will be determined in the field (though they have been tentatively identified on maps within this Work Plan). The co-located sampling stations will be used to help in our understanding of contaminant uptake by organisms. Though, the other 14 sampling locations, in addition to the 8 triad locations, as well as previous data, will still be used in the analysis of extent of contamination, and risks to human health and the environment. It is our premise that co-located samples/use of a triad methodology will help reduce the uncertainty in the data interpretation, especially with regards to contaminated sediment impact on the environment.

The Work Plan defines some statistical methods for data analysis and interpretation of the data that appear to be consistent with EPA guidelines and serves as a good outline for how Xcel will

interpret the data.. However, please be advised that the Agency will work with Xcel in a proactive manner to help in data interpretation and ensure that all Agency guidance is followed. Where Xcel proposes a methodology that is not addressed in EPA policy or guidance, EPA expects that such a methodology is a peer-reviewed method accepted within the academic community.

With regards to sediment sample substrates, it is our hope that once in the field, we will be able to find enough sampling locations (statistically valid) that provide us with adequate information to assess the system within a clean wood substrate and a clean geologic substrate, as well as within a contaminated wood substrate and contaminated sediment (no wood) substrate, as well as gradients between the two. As discussed and agreed to at our technical meeting, we believe that 8 such locations will be adequate. Please be advised that if necessary, either EPA or Xcel may request a field modification to the sample number, depending upon what is found at the reconnaissance.

4. Please revise the sediment sampling of the bioactive zone to extend down to 15 centimeters (as opposed to 10 centimeters). This will enable comparison of present day data with data collected previously.

5. Please revise the type of sieve to be used in the benthic community study from a 500-micron mesh screen to a 250 micron mesh screen. This will make this work consistent with WDNR field sampling protocols (and enable some comparison of present day data to previously collected data).

6. If UV affects are seen at the 4 foot depth location, we will assume that there are certainly greater effects in the shallower zones. Otherwise, additional samples should be located closer to the shoreline.

7. Please revise the test organism holding times. Instead of 20 or more days in an oxygenated, flow through system, EPA requires that the sediment be placed in the test chambers one day prior to the testing, letting the sediment stand overnight to equilibrate, and then adding the test organisms the next day to initiate the testing. A static renewal system is a better model of a lake system than a flow through system (which would be more comparable to a river).

8. Better reference locations would include samples that are absolutely outside the zone of influence of PAHs and coal dust. Reference locations should therefore be selected away from the coal/ore docks and marina. In addition to samples that may reflect marina and coal dock contaminants ("commercial background"), additional locations should be selected as the reference areas that are not contaminated by any PAHs. All such data will be taken into account when establishing possible clean up criteria.

9. Fish tissue sampling - Final sampling program and species to be determined based on additional information to be provided. EPA's preference is to ensure that the species collected represent each trophic level (e.g., benthic feeders, top-order predators, etc). Depending upon the

time-frame, different species will be available for sampling. Also, it is important to ensure that species that are consumed by subsistence anglers, as well as sport anglers are sampled. The Bad River Band of the Lake Superior Chippewa and the Red Cliff Band of the Lake Superior Chippewa will be asked to provide additional input into the fish sampling program to ensure that the species important to their treaty rights and to their subsistence anglers are addressed by the sampling program. Based on that knowledge, EPA may require an additional sampling program in the winter (depending upon the spring/summer sampling results). Please revise the work plan to allow such flexibility and to provide for flexibility in the field.

10. Clarifications needed on UV light work/fish larvae bioassays:

- A. What is the purpose of adding leaf detritus;
- B. Provide a nepheloid zone definition and better description of the placement of the sensor;
- C. Include UVB exposure along with UVA exposure (since UVB is discussed in SOPs but not in general work plan);
- D. Field measurements have to assume the fish will be moving within various depths and will not be confined to a small zone over a bottom nepheloid zone, and so measurements at incremental depths would make sense;
- E. In addition to UV testing at marginal or no toxicity locations, wouldn't UV testing at moderate toxicity locations provide a complete data set? This would help with defining potential cleanup goals for the range of contaminated areas (highly contaminated, moderately contaminated, marginally contaminated).
- F. Wouldn't water accommodated fraction (WAF) of the coal tar oils and residuals prepared from the bottom substrates, rather than exposure in water over substrates be more representative of field conditions and more similar to the substrate elutriate exposures conducted in previous work for comparison?
- G. Previous bioassays used a 3:1 ratio for sediment:water. How was 5:1 derived and where has it been used before?

11. Treatability Studies

The proposed schedule within this work plan assumes that a treatability study decision will not be made until after a Feasibility Study is completed. The approval of this work plan does not mean that this part of the schedule is "approved." While the treatability study portion of the work is left as an option, and it is provided with a task number (task number 6) for ease in the AOC/SOW, EPA or Xcel Energy may determine that treatability studies are necessary, at any time in the process. Please note that EPA will make a decision concerning the need for treatability studies as RI field work progresses, or sooner. At this time, it is clear that we should at least consider the potential universe for treatment, in-situ and ex-situ. Various avenues exist for exploring treatability options and we should begin discussions about them as soon as possible.

12. QAPP

Page 7-3. Paragraph 7.1.4 Data Validation. Please explain how the data review and verification will be organized in this project to meet the Superfund requirements (page 60 of 68 "Instruction on the preparation of a Superfund Division Quality Assurance Project Plan": a 100% laboratory data validation must be performed by an entity independent of the laboratory.

Table 8. Please correct the typo in the % recovery column for the Mercury in soil analyses.

Please include a comprehensive list of each SOP (a table of contents for the SOPs, laboratory specific) so that it is clear what SOPs are included and which SOP applies to specific labs.

Chain-of-Custody forms from the STL lab should be submitted.

Please reorganize the presentations of the SOPs for the NLS SOP Manual. Make SOPs accessibly for everyone's convenience. The Document Control Format (DCF) could be used for each SOP or at least individually paginate each SOP.

QAPP Addendum. Section 4.1 Sample preparation for Organic Analytes: . Please provide documentation illustrating superiority of your preferred preparation analytical method. Analytical SOPs should be written and formatted in accordance with Guidance for Preparation of Standard Operating Procedures for Quality-Related Documents, (EPA QA/G-6). In addition to a detailed step by step description of the procedure, all SOPs must specify appropriate QA checks and samples with explicit concentration and frequency requirements for preparation and analysis, QC acceptance limits and required corrective actions for each step of the procedure.

QAPP Addendum: A Document Control Format (DCF) should be used to individually paginate each QAPP element to facilitate revisions as well as ensure that no pages are missing. The DCF to be placed in the upper right-hand corner of each page and should include: Project name, QAPP, FSP or Work Plan, revision number, revision date, section/element and page number (Page 9 of 68 of the "Instruction on the preparation of a Superfund Division Quality Assurance Project Plan," 2000).